

**Sample Analysis
CITY OF SAN DIEGO
December 2006, HE-p113**

Energy Conservation

QUANTIFIED OBJECTIVE: Energy Conservation

Maintain the goal of reducing by two percent total utility consumption per customer, although total energy demand is expected to increase during the period due to population growth.

Water Utilities Department: Water Conservation will increase to five percent by 2010 over current levels according to the City of San Diego's Strategic Plan for Water Supply.

Promote increased energy conservation in 20 housing development projects annually by encouraging developers to exceed California Title 24 standards. As an incentive, plan check status will be expedited for sustainable housing developments per Council Policy 900-14- Sustainable Building Policy.

Encourage initiatives to increase the use of renewable resources, such as photovoltaic/solar electric systems and solar water heating, with a goal of builders/developers offering solar options in 50 percent of new single-family housing unit developments by FY 2010.

Encourage initiatives to increase the use of solar water heating in multifamily developments with a goal of increasing use of solar water heating to 50 percent of new multifamily housing unit developments by FY 2010.

CHANGES TO QUANTIFIED OBJECTIVE FROM PREVIOUS HOUSING ELEMENT

As in the previous Housing Element, the objective is defined in terms of "total energy consumption per customer." The change from "per capita" to "per customer" was made at the suggestion of the San Diego Gas and Electric Company (SDG&E) to more accurately gauge usage. One customer is equal to one gas or electric meter.

Utility consumption for the Housing Element cycle may prove more difficult to measure as utility customers now have the ability to choose their provider.

Additionally, three new goals have been added to incorporate newly adopted state energy efficiency standards and to encourage alternative energy efficient technologies such as solar electric and solar water systems.

POLICIES

1. The City shall support the SDG&E programs to promote energy conservation.
2. The City shall support the Water Utilities Department's programs to promote water conservation.
3. The City shall support state energy efficiency requirements in new housing and encourage the installation of energy saving devices in pre-1975 housing.
4. The City shall support and implement its Urban Water Management Plan and Conservation Program (Resolution R-277077) to develop a sound water storage program and promote voluntary water conservation and retrofitting of pre-1981 housing.
5. The City shall encourage and support cost-effective energy technologies with both positive economic and environmental impacts, e.g., passive solar space heating and cooling and water conservation.
6. Insofar as practical, the City shall utilize its planning processes to promote efficient land use and development patterns which conserve such resources as fuel, water and land.
7. The City shall support and encourage high performance design standards in new construction and redevelopment to promote increased energy conservation.
8. The City shall support the installation of photovoltaic/solar and solar water heating systems on new construction to promote and increase the use of renewable resources.

PROGRAMS

1. Residential Interior/Exterior Water Survey Program
The Water Utilities Department shall provide residential customers an interior and exterior water use survey of their home. This service shall include a water usage analysis including flow rates of fixtures, checking for leaks, installing water-saving devices and water efficient landscape and irrigation recommendations. A typical household benefiting from this program can reduce daily water consumption by 13 percent.

2. Ultra-Low Flush Toilet Rebate Program

The Water Utilities Department shall provide cash rebates of \$75 per installed toilet to City residents who install ultra-low flush toilets. This program, which began in 1991, is responsible for over six million gallons per day of water savings and shall provide 30,000 rebates per year through 2010.

3. Reduced Energy Use Code Requirements

The City's Land Development Code requires that all toilets over 3.5 gallons per flush be replaced with ultra-low flush toilets. It also requires that faucets, showerheads, urinals and reverse osmosis systems be low-use compliant. Focus will be shifted from enforcement to a marketing campaign to highlight benefits of saving water and money.

4. Single-Family and Multifamily Audits

The Water Utilities Department will conduct audits on a voluntary basis with single family and multifamily households to assist them in reducing water consumption. The audit will include retrofitting residences with water efficient devices, conducting a landscape water audit, providing specific recommendations for minimizing interior and exterior water usage, and furnishing customized landscape irrigation schedules. Approximately 2,500 City residences shall be audited annually.

5. Title 2.4-California Building Code

This state law requires phasing out older less energy efficient toilets by replacing them with toilets that use only 1.6 gallons per flush. San Diego Municipal Code Section 93.0208 also requires that faucets, showerheads, urinals and reverse osmosis systems also be low-use compliant.

6. Enhanced Public Education Program

The components of this public education program include the development of a speaker's bureau, developing and maintaining a Department and Water Conservation website, distribution of higher quality brochures and fact sheets, a media campaign that includes local news stations and radio stations, and better coordination with the San Diego County Water Authority and the Metropolitan Water District of Southern California.

7. Residential H-axis Washing Machine Rebate Program

The City of San Diego will support an SDG&E rebate program that will issue \$75 rebates for installation of H-axis washing machines. Residential H-axis washers will save approximately 5,100 gallons per year for 16 years.

8. Citywide Landscape Design Ordinance

The City will continue to implement the citywide landscape design ordinance, which encourages the use of plant materials to reduce heat island effects and requires drought tolerant plants and low-flow irrigation systems. The irrigation systems must include rain sensing devices to shut irrigation off during rainy periods and soil sensing devices to measure the amount of moisture in the soil.

9. SDG&E Conservation Programs

The City shall continue to cooperate with SDG&E in the provision of information about their energy conservation programs.

10. Community Energy Partnership Program

The San Diego Regional Energy Office (SDREO) will partner with SDG&E to provide assistance to the City of San Diego to develop energy efficiency policies to encourage energy conservation through high performance standards in residential construction. SDREO will support the City following policy adoption to maintain program participation and success.

11. Home Energy Partnership Program

San Diego Gas and Electric Company will provide cash incentives to builders and energy support teams for exceeding Title 24 or meeting Energy Star building standards, offer design assistance and provide free training courses to enhance energy savings in homes.

12. Renewable Buy Down Program

The California Energy Commission will provide cash rebates on eligible renewable energy electric generating systems of up to \$3,500 per kilowatt or 50 percent of the eligible purchase price, whichever is less.

13. California Tax Credit

Solar systems certified by the California Energy Commission and installed with a five year warranty are eligible to receive a tax credit equal to the lesser of 15 percent of the purchase cost of a photovoltaic or wind driven system with a generating capacity of not more than 200 kilowatts. This credit will sunset on January 1, 2011.

14. General Plan

As part of its General Plan update, the City shall emphasize efficient land use and development patterns which conserve such resources as fuel, water and land. The City of Villages concepts of higher-density development in the vicinity of major transit nodes, a pedestrian-oriented development pattern and preservation of open space areas are intended to reduce energy consumption and conserve land and water resources.